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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,316	12/11/2003	Masaki Shimada	534101-9	2218
27799	7590	01/03/2007	EXAMINER	
COHEN, PONTANI, LIEBERMAN & PAVANE			VO, THANH DUC	
551 FIFTH AVENUE			ART UNIT	PAPER NUMBER
SUITE 1210			2189	
NEW YORK, NY 10176				
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE		DELIVERY MODE	
3 MONTHS	01/03/2007		PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/735,316	SHIMADA ET AL.	
	Examiner	Art Unit	
	Thanh D. Vo	2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 October 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-9 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-9 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This final Office action is in response to the RCE filed October 16, 2006. Claims 1, 3 and 6 have been amended. Claims 1-9 are pending. All objections and rejections not repeated below are withdrawn.

Claim Objections

2. Claims 1-9 are objected to because of the following informalities:

As per claim 1, the limitation "first commands" in the last indentation of page 2 should be written as "first command" in order to provide the antecedent basis for "the first command" used thereafter.

Claim 1, the comma (,) in the second indentation of page 3 in the phrase "...a predetermined command, after transmitting..." should be omitted.

All dependent claims are objected to as having the same deficiencies as the claims they depend from.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanai et al. (US Publication 2003/0005355) in view of Zumkehr et al. (US Publication 2001/0025338).

As per claim 1, Yanai et al. discloses an information processing apparatus comprising:

a first recording medium reading portion capable (Fig. 1, item 30) of reading out electronic information from the first recording medium (*Fig. 1, item 20 and page 2, paragraph 0025, lines 6-7*);

a second recording medium reading/writing portion capable (Fig. 1, item 66) of reading out and writing electronic information from and in the second recording medium (*page 3, paragraph 0036 lines 3-5*), the second recording medium reading/writing portion being coupled to the first recording medium portion so as to be able to exchange electronic information (*Fig. 1, items 20 and 40 are coupled together through communication link 40 and communicating with each other*);

an operating member which starts recording by the second recording medium reading/writing portion of the electronic information outputted by the first recording medium reading portion (*page 3, paragraph 0036, lines 3-5, and the operating member is an inherent feature in the second storage device since the storage device comprises of read and write operation therefore there is certain operating member exists within the second storage device*);

first control means for controlling the first recording medium reading portion (Fig. 1, item 16);

a cache (Fig. 1, item 64) which stocks electronic information to be written in the second recording medium before the electronic information is written in the second recording medium (*page 5, claim 1, second indentation, lines 9-13*); and

second control means for exchanging electronic information with the first control means via predetermined interface means and controlling the second recording medium reading/writing portion and said cache (*page 5, claim 1, second indentation*),

wherein the first control means reads out electronic information from the first recording medium with the first recording medium reading portion in accordance with an operation of the operating member and transmits the read out electronic information to the second control means together with a first command (*writing command*) to request writing of the read out electronic information in the second recording medium (*page 6, claim 1, third indentation*);

wherein the second control means stocks in the cache a plurality of the first commands/*write command* and the respective electronic information/*data* associated therewith which have been transmitted from the first control means (*page 5, claim 1, second indentation, lines 6-11*), and writes in the second recording medium the electronic information stocked in the cache by executing the plurality of the first commands(*page 5, claim 1, second indentation, lines 11-13*);

wherein the first control means transmits a second command which is different from the first command (*page 5, claim 1, third indentation, lines 1-5, wherein the pending indicator/second command is set to indicate the recipient of the data from the host*), and to which the second control means responds with a predetermined

command [[,]] after transmitting to the second control means all electronic information to be recorded written in the second recording medium (*page 5, claim 3, wherein the second controller responded with an acknowledgement*); and

wherein the first control means determines that transfer of the electronic information from the first recording medium to the second recording medium has been completed when a response to the second command is sent back from the second control means to the first control means (*page 5, claim 1, third indentation, wherein the pending indicator is included in the first controller and the pending indicator is reset once it received an acknowledgement from the second controller*).

Yanai et al. discloses a method of writing the command and data to the second storage device but Yanai et al. did not explicitly disclose the method of executing the plurality of first command in the order which they were stocked.

However, Zumkehr et al. disclosed a FIFO cache wherein the data and command are stored and being executed in a first in first out order fashion (page 3, paragraph 0026, lines 1-10).

It would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to modify the cache of Yanai et al. to combine the FIFO cache of Zumkehr et al. so that all of the instructions/commands are being executed accordingly and in-order in order to avoid data or command being held in the cache instead of transferring to the their destination for an infinite period of time.

As per claim 2, Yanai et al. discloses an information processing apparatus comprising expression means for expressing completion of transfer from the first

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recording medium to the second recording medium (*page 5, claim 4, wherein the first controller of the first storage device send an i/o completion to the host*).

4. Claims 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanai et al. in view of Zumkehr et al. (US Publication 2001/0025338) and further in view of Mambakkam et al. (US Publication 2003/0041284).

As per claim 3, Yanai et al. and Zumkehr et al. did not explicitly disclose an expression means includes a display device, and expression operation includes transfer of a visual message to a user.

Mambakkam et al. discloses an express means include a display device and expression operation includes transfer of a visual message to a user. See page 6, paragraph 0084, lines 1-5.

It would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to include a display device to display a visual message to the user since a display device will enhance the user operation process.

As per claim 4, Yanai et al. and Zumkehr et al. failed to disclose a display device includes a monitor which displays a message.

Mambakkam et al. disclosed a monitor (LCD 88) to display a message. See page 6, paragraph 0084, lines 1-2.

As per claim 5, Yanai et al. and Zumkehr et al. failed to disclose a display device includes an LED.

Mambakkam et al. discloses a display device includes an LED. See page 6, paragraph 0082, LED.

It would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to use an LED as an display device since an LED is inexpensive and it provides a simple visual indication to the user of the copying progressing or error indication as disclosed in page 6, paragraph 0082.

As per claim 6, Yanai et al. and Zumkehr et al. failed to disclose an expression means includes a sound generating device, and expression operation includes transfer of an auditory message to a user.

Mambakkam et al. discloses an expression means includes a sound generating device, and expression operation includes transfer of an auditory message to a user. See page 6, paragraph 0083, lines 1-6.

It would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to include a sound generating device to generate an auditory message to user since most users are best at working with a visually display message or an auditory message.

As per claim 7, although Yanai et al., Zumkehr et al. and Mambakkam et al. did not explicitly disclose, wherein the sound generating device includes a loudspeaker.

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However, it would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to modify the speaker of Mambakkam et al. into a loudspeaker since it is advantageous to have a loudspeaker to provide an audible auditory message to the user in a noisy working environment.

As per claim 8, Yanai et al. and Zumkehr et al. did not explicitly disclose an information processing apparatus wherein removal of the second recording medium is permitted in accordance with an end of transfer from the first recording medium to the second recording medium.

However, Mambakkam et al. disclosed a removable storage device 76. See page 5, paragraph 0076, lines 3-4.

It would have been obvious to one having an ordinary skill in the art at the time of the Applicant's invention to modify the storage device of Yanai et al. into a removable storage device since it is advantageous to carry the storage device to another site to perform other operation if necessary.

As per claim 9, An information processing apparatus, wherein the first recording medium reading portion is the first insertion/removal portion capable of inserting/removing the first recording medium and reading out electronic information from the first recording medium; and wherein the second recording medium reading/writing portion is a second insertion/removal portion capable of inserting/removing the second recording medium and reading out and writing electronic

information from an in the inserted second recording medium *are inherent feature in the computer art since all of the storage devices are once attached could be removed or replaced by another storage device.*

Response to Arguments

5. Applicant's arguments filed in the RCE have been fully considered but they are not persuasive.

Applicant argues that the cited prior art of Yanai et al. fails to teach the following:

- a. The first control means transmits a second command which is different from the first command.
- b. The second data storage system sends the acknowledgment to the first data storage system responding to any command sent from the first data storage system.
- c. The first control means transmits a second command which is different from the first command, and to which the second control means responds with a predetermined command after transmitting to the second control means all electronic information to be written in the second recording medium.
- d. A plurality of electronic information is sent from the first data storage system to the second data storage system. Applicant further argued that Yanai et al. merely discloses that **one lump of data** is sent from the first data storage system to the second data storage system rather than **plurality of electronic information**.

Applicant argues that Zumkerh fails to teach the following:

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e. The first control means transmits a second command which is different from the first command, and to which the second control means responds with a predetermined command after transmitting to the second control means all electronic information to be written in the second recording medium

With respect to (a):

Applicant argues the **difference** between the first command and the second command. However, claim 1 of the current invention does not define the difference between the first command and the second command. Therefore, as interpreted by Examiner, the second command is simply a repetition of the first command or a separated command that are different from each other in time.

In addition, Applicant argues that the write pending indicator is not equivalent to transmitting a second command along with transmitted data to the second storage system since the pending indicator is a bit (0/1).

Examiner respectfully disagrees. First, claim 1 does not mention that the second command is transmitted along with the transmitted data. Second, a bit of data is still considered as data. Furthermore, a command inherently comprises of data within itself.

With respect to (b):

Yanai et al. invention is about sending the data from the first storage system to the second storage system. Once the data is written into the second data storage system, an acknowledgment is sent to the first storage system. Therefore, Yanai et al. clearly teaches that second data storage system sends acknowledgment to the first

data storage system responding to the write request/any command sent from the first data storage system that previously initiated.

With respect to (c):

(c) is merely a combination of (a) and (b); therefore, refer to (a) and (b) for their corresponding arguments.

With respect to (d): -

Applicant argues that Yanai et al. fails to teach the limitation "a plurality of electronic information is sent from the first data storage system to the second data storage system" since Yanai et al. is simply teaching **data** rather than plurality of electronic information.

Data is readily apparent to one having an ordinary skill in the art that data comprises of plurality of binary numbers (0/1), wherein binary numbers are electronic information. Therefore, such limitation argued by Applicant is clearly anticipated by the cited prior art.

With respect to (e):

Since Yanai et al. teaches every limitation in claim 1 except the ordering of the data being transmitted from the cache. However, Zumkerh fulfills the deficiency of Yanai et al. by disclosing a FIFO feature in Zumkerh invention. Therefore, it would have been obvious to one having an ordinary skill in the art to combine the two inventions to arrive at the current invention.

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Conclusion

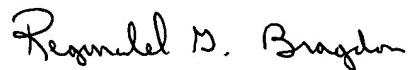
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh D. Vo whose telephone number is (571) 272-0708. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald G. Bragdon can be reached on (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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